

# Work safely

## Digging

- Use the intermediate boom extension and rotation controls to position the digger directly over the hole location.
- A moderate steady down force on the digger using the boom control will produce the most efficient digging.
- Be careful not to use excessive down force as this may cause the auger to corkscrew into the ground. If this occurs stop digging and use the clean function to release the auger.
- Use the boom controls to follow the auger into the ground. This is especially true if the auger is positioned at a side angle to the boom.
- Maintain alignment of the hole and the auger shaft. Failure to do so can bend the auger or auger extension shaft. If the auger or auger shaft bends, stop digging immediately. A bent auger or shaft must be straightened or replaced immediately.



**WARNING:** Use extreme caution when stowing or unstowing a bent auger or auger extension shaft. Failure of the digger output shaft, auger extension shaft or auger windup could occur causing a free swinging auger. Death or serious injury could result.

## Stowing The Digger



**WARNING:** All personnel must be clear of the area before stowing or unstowing the auger. A free swinging auger can cause death or serious injury.

- Return the auger extension shaft to its original position if it has been lengthened.
- Fully retract the intermediate boom.
- Make sure the digger speed switch is in the low position.
- Rotate the boom to a position that will allow the boom and auger to clear all obstacles when the digger is stowed.
- Attach the auger windup rope/cable to the auger following the manufacturer's instruction.
- Meter the dig control to the correct position, following your manufacturer's operating instructions, until the auger slowly winds up into the stowed position.
- Refer to your manufacturer's manual for proper operation of the auger latch.



**WARNING:** Failure to meter the auger control could result in rapid windup of the digger and shock loading when it enters the auger stow bracket. Component failure due to shock loading could cause a free swinging auger, which may cause death or serious injury.

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## Remote Power Tool Usage

Your digger derrick may be equipped with remote tool outlets to accommodate hydraulic tool accessories. Before connecting or disconnecting a tool to a remote outlet bleed off any hydraulic pressure by turning the pump off and cycling the controls several times. Make sure and keep hydraulic hose connectors clean and dry at all times. Read and follow the manufacturer's instructions for proper use of the tools.



**WARNING:** Tool circuits may reach very high pressures if a tool is stalled. This could cause bursting or leakage of the hoses or tool. Hydraulic fluid under pressure can penetrate the skin or eyes and cause injury, blindness or death. If any fluid is injected into the skin, it must be surgically removed within a few hours by a doctor familiar with this type of injury.



**DANGER:** The booms must not be elevated near energized conductors when operating a lower tool system. Lower tool system hoses may be conductive. If the machine were to become electrically charged, death or serious injury will result.

## Pole Puller

The pole puller should be used to break a pole loose from the ground. The winch and boom functions can then be used to remove the pole from the ground.

The pole must be within the machines load capacity and booms must not be raised near energized conductors.

Before using the pole puller, attach the winch line at the top of the pole to support the pole once it is loose in the ground.



**WARNING:** Use only one wrap of chain around the pole. A “choke” chain could cause the chain to break with great force. A chain flying off the pole could cause serious injury to nearby personnel.



**WARNING:** Clear all personnel from the area before extending the pole puller cylinder. A falling pole could cause death or serious injury.

When finished using the tool outlet, the circuit pressure should be bled off by stopping the pump and cycling the hydraulic controls several times. The control should be returned to the off position. All hoses and tools must be returned to their stowed position. Wipe up any spilled hydraulic fluid.

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## Personnel Platform

Your digger derrick may be equipped with a personnel platform mounted on the upper boom. This platform is to be used to position personnel for aerial operations. Follow the manufacturer's instructions contained in the operator's manual for proper deployment of the personnel platform.



**WARNING:** Insulated machines require that specific configuration, maintenance and boom deployment instructions be followed to maintain the dielectric rating. These instructions are found in the manufacturer's manuals and on decals and signs on the digger derrick. Failure to follow these instructions can lead to serious injury or death in the event of electrical contact.

Read and understand your manufacturer's operation manual before using the platform. Make sure you are aware of and have received instruction in the location, function and proper use of all controls. If there is no manual with the machine—get one. Read and understand it before you start work.

If there is something in the manual you don't understand, ask your supervisor to explain it to you.



**WARNING:** Park on a firm flat surface before operating the platform. Always use wheel chocks and parking/holding brakes. Outriggers must be extended as directed in manufacturer's operating manual. Outrigger pads must be used on all unpaved, asphalt or other soft surfaces.



**DANGER:** Maintain clearance as specified in local, State/Provincial, company work rules and Federal (OSHA) rules from energized power lines. Contact with or inadequate clearance from energized conductors will cause DEATH or serious injury to persons in contact with or near the vehicle, load or any extensions of them.

## Remember The Other Person



**WARNING:** Never allow an untrained or unqualified person to operate your digger derrick. Handled improperly, this digger derrick can cause severe injury or death.

## Remember These Rules

- Never allow anyone else to enter the booms rotation area or walk under the platform or suspended load.
- Keep your fall protection device fastened and comfortably snug. (14)
- Securely fasten any safety chain (if equipped).
- Use your personal protective equipment.
- Be in control of your machine at all times.
- Look and listen for malfunctions.
- Stop if a malfunction or erratic operation is detected.
- Correct or report trouble immediately.
- Keep both feet on the floor of the platform.



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## Safety Precautions (15)

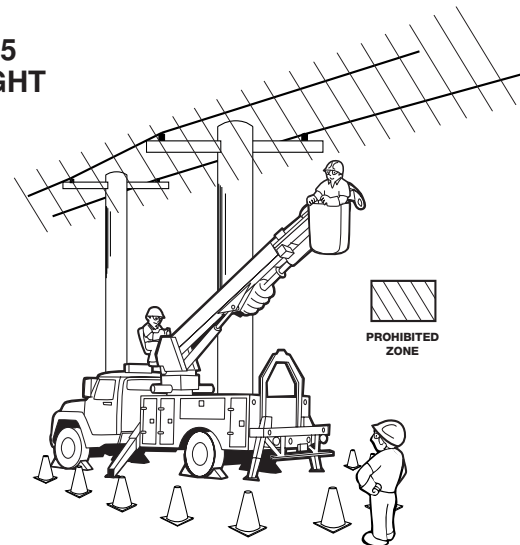
- Set brakes, chock the wheels and set outriggers before operating.
- Make sure the area is clear of all persons before you start operating.
- As necessary, use a signal person to control traffic.
- Keep yourself and others away from the outriggers when they are being operated.
- Always have outriggers in view when they are being extended, and/or use a signal person to watch.
- Place barriers or barricades around your vehicle to keep bystanders out of boom rotation area. Federal law **REQUIRES** barriers when working on or near energized conductors.
- Use care when getting on or off the unit and entering or exiting the platform to avoid falling. Maintain a three point contact with the machine.
- Check the clearance overhead. Note any obstructions. Know exactly how much clearance all parts of your digger derrick have around energized power lines.



**DANGER:** NON-INSULATED machines shall NOT be used on or near any energized power line. Death or serious injury will result from contact with or inadequate clearance to energized power lines or apparatus.

- YOU MUST ALLOW FOR PLATFORM SWAY, ROCK AND CREEP, ALSO ELECTRICAL LINE SWAYING.
- Ground personnel must not contact the vehicle when the unit is working on energized power lines.
- Beware of strong and/or gusty wind conditions.
- Always make sure that you follow the manufacturer's recommendations while operating the digger derrick personnel platform.

## 15 RIGHT



Keep your distance from energized power lines.

# Work safely

## Utilities - Overhead

Electrocution can result from contacting or approaching energized overhead power cables. Only INSULATED machines are suitable for this work.



**WARNING:** No digger derrick, insulated or not, is considered PRIMARY protection for the operator from electrical contact. Use all required protective equipment, maintain specified distance from electrical lines or apparatus and follow all local, state/provincial and federal (OSHA) required safety precautions. Failure to take these precautions can result in serious injury or death in the event of electrical contact.



**DANGER:** An insulated platform provides no protection from contact between two energized conductors or between an energized conductor and a grounded conductor by the operator, even with insulated machines.



**WARNING:** Due to the presence of metal parts the boom-tip of a digger derrick must be considered conductive. If any part of the boom-tip contacts an energized conductor, the entire boom-tip, **including the control**, must be considered grounded.



**WARNING:** Hydraulic fluid is flammable. Contact by any part of the boom-tip with an energized conductor while the boom-tip is also in contact with another energized source or a grounded object can cause the hydraulic fluid at the boom-tip to burn or explode and cause serious injury or death.



**DANGER:** Never pass platforms between energized power lines, even with insulated machines. (16)



**DANGER:** With an insulated machine, never approach energized power lines with any part of your machine unless all local, State/Provincial, company work rules and Federal (OSHA) required safety precautions have been taken. Use extreme caution. **YOU MUST ALLOW FOR PLATFORM SWAY, ROCKING AND CREEP, AS WELL AS ELECTRICAL LINE SWAYING.**

**Check overhead clearances:** Know your margin of safety. If possible, have power to the lines disconnected. If not possible, request a signal person for guidance to maintain at least minimum distance required by OSHA from energized power lines.



**Inadequate clearance can be fatal.**